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THE FIFRA PROGRAM  
SURVEILLANCE REPORT  
FOR THE  
ROCKY FLATS PLANT

Conducted by:  
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March, 1991

ADMIN RECORD

A-SW-000758

## OUTLINE

I. SUMMARY

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## I. SUMMARY

A surveillance of RFP's compliance with the Federal Insecticide, Fungicide, and Rodenticide Act was initiated in October, 1990. EG&G, was asked to respond to an initial questionnaire dealing with the major aspects of the Act. Based on the completed questionnaire, followup interviews were conducted with involved personnel and facilities were visually inspected. EG&G personnel who were interviewed included: Dan Kunz with Permitting and Compliance, Dick Irwin with Plant Services, Ralph Hawes with Clean Water Act Division, and Mike Guillaume with Remediation Programs.

The surveillance revealed that RFP is in compliance with FIFRA. However, there are several weaknesses and discrepancies in the way the program is functioning. There are operational as well as organizational problems which need to be corrected. One significant action that occurred was the decision to utilize off-site contractors to furnish and apply the larger quantities of pesticides such as herbicide used for spraying in the buffer zone. This decision alone has greatly reduced the amount of necessary compliance required by FIFRA. Based on discussion in Section IV, "Conclusions and Recommendations", the following actions are necessary to correct deficiencies in the program:

1. Assign the overall program responsibility to a single organizational unit. In addition, assign specific functional responsibilities, as necessary, to the other involved organizational units, but implement an oversight process.
2. Develop a central filing and record system for all pesticide acquisitions and applications. Develop procedures for how that record system is to be maintained and assign responsibility for that maintenance.
3. Ensure that the use of pesticides on RFP is included in the Site-Wide EIS, which is currently being developed. Consider whether there is an urgent need to utilize pesticides prior to the completion of the EIS and if so, prepare the appropriate Environmental Assessment.
4. Correct the storage problem in Bldg 331 where wasp spray is stored with other products that have a similar label.
5. Find "missing" Bldg 667 and determine whether pesticide residues may exist on site.
6. Develop a schedule for preparing a plant wide Integrated Pest Management Plan. This Plan will help ensure that all pesticides used on RFP will be in compliance with FIFRA.

7. Once the supply of NALCO 2810 biocide is exhausted(expected by end of summer), consider using chlorine bleach as the preferred method of treating algae growth in the swamp coolers and cooling towers.

## II. FIFRA SURVEILLANCE BACKGROUND

Although chemical pesticides have been subject to some degree of Federal control since the Insecticide Act of 1910, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) was not passed until 1947. FIFRA was enacted to help prevent pollution by establishing a product registration, labeling, and review process for all pesticides produced and distributed for use in the United States. The Act has been amended several times with the latest amendment occurring on October 25, 1988. Until December 2, 1970, when the Environmental Protection Agency was created, the Act was administered by the Pesticide Division of the Department of Agriculture. EPA now administers FIFRA until a State has enacted their own laws as stringent, or stronger, than the Federal law and are willing to assume primacy. EPA assigned responsibility for FIFRA to Colorado when the State passed the "Pesticide Act", which was as stringent as the Federal Law. This law was last amended on June 7, 1990. In addition, Colorado has in place the Colorado Pesticide Applicator's Act to license and regulate the commercial applicators.

The Law, at both the Federal and State levels, primarily targets the producers, distributors, and commercial applicators. In addition, the State law closely follows 40 CFR Part 171 in licensing requirements of commercial applicators. All pesticides sold or used in the State of Colorado must be registered with the State. Beyond registration and annual reports from retailers on the amounts sold, there are no attempts by EPA, or the State, to control normal household use of approved pesticides. Guidance is provided on the labels of household pesticides for the storage, use, and disposal of these products and their containers.

Since pesticides have been and will continue to be utilized at RFP, RFO determined that a surveillance was necessary to examine the status of the plant in meeting the requirements of the Federal and State of Colorado laws dealing with pesticides. This surveillance was initiated in October of 1990 with RFO transmitting a surveillance questionnaire to EG&G for an initial purview of the pesticide program. Based on the completed questionnaire, RFO conducted interviews with involved EG&G personnel, conducted field inspection of facilities, and reviewed existing files. Individuals interviewed included: Dan Kunz with Permitting and Compliance, Dick Irwin with Plant Services, Ralph Hawes with Clean Water Act Division, and Mike Guillaume with Remediation Programs. Other

incidental contacts were performed with a variety of personnel in other organizational units, but no followup interviews were necessary.

In the early 1980's a decision was made to have an off-site contractor apply the pesticides for the majority of the treatments. This in effect eliminated the storage and disposal problems associated with use of pesticides beyond the normal household type use.

### III. FINDINGS

The following section represents the findings based on information provided on the surveillance checklist and in discussions with EG&G personnel involved in the program. The items are numbered to coincide with the individual item numbers from the "Surveillance Questionnaire", which are also referenced on the "Surveillance Guidesheets" used for the personal interviews. See Appendices "A" and "B" respectively for the Surveillance Questionnaire and the Surveillance Guidesheets. In several instances answers given during interviews are not identical to the response provided on the Surveillance Questionnaire. This departure is attributable to misunderstanding of the specific Questionnaire question.

#### Item 1. Current Use of Pesticides: (In Compliance)

- a. RFP personnel use household type pesticides such as mice poison (d-CON), and aerosol cans(Bowman brand) of wasp poison on an as-needed basis. In addition, Terminex(an off-site commercial applicator) has been contracted to apply an insecticide(F1CAM+) around buildings with cafeterias and the Medical Building to control ants and spiders. Their contract also included the use of ROZOL mouse bait and Isotrax tracking powder for rodents.
- b. RFP uses a biocide(NALCO 2810) for controlling algae in swamp coolers and cooling towers.
- c. RFP did not use herbicides in 1990 and is proposing no use in 1991 (March 7, 1991 EG&G Memo) due to possible effects on water quality.

#### Item 2. Use of Highly or Moderately toxic pesticides: (In Compliance)

- a. The pesticides listed in Item 1 are considered to be low to moderate in toxicity.
- b. There are no pesticides currently being used on RFP that are considered to be highly toxic.
- c. Restricted use pesticides have not been used on RFP nor are there any plans to use any restricted use pesticides.

#### Item 3. Excess pesticides: (In Compliance)

- a. There are no excess pesticides to be disposed of on RFP. The pesticides on site are purchased in small quantities and are used within the shelf life of the product.

**Item 4. Established procedures for incidents and accidents: (In Compliance)**

- a. No procedures have been developed specific to the pesticide program.
- b. Releases would be handled under the plant procedure for any other accident or incident as outlined in DOE Order 5000.3A.

**Item 5. Canceled or suspended pesticides: (In Compliance)**

- a. Not applicable.

**Item 6. Records pertaining to amounts, location, etc.: (In Compliance)**

- a. The only records available for amounts, date of purchase, etc. are those maintained by the Purchasing Department. Records for the amounts on hand is currently maintained by the responsible individual, i.e. Dick Irwin for the wasp spray.

**Items 7 through 31. Storage facilities and procedures: (In Compliance)**

- a. These items all deal with storage issues, since RFP does not store large amounts of pesticides most of these issues do not apply to the plant.
- b. The small quantities of wasp spray and mouse poison are stored in a metal cabinet located in Bldg 331. The cabinet is locked, painted red and has "Flammable" labeled on the front. The cabinet also contains spray cans of lubricants and other like items. The wasp spray and the lubricants are from the same manufacturer and have nearly identical labels.
- c. The cabinet is located in the automotive repair shop and is not located immediately adjacent to lunch or break areas. Since it is in the automotive repair area, there are showers for employees and desiccants for spill control available.
- d. There is a record in the file that indicates that several hundred gallons of pesticide was stored in Bldg. 667(see appendix C) at least up through 1978. Contact was made with Facility Management to determine the status of the building, who thought that building was renumbered and became Bldg. 668. They referred me to Carl Trump who is the building representative for 668. Carl checked his records and talked to employees that have been here for several years and determined that perhaps bldg 667 is now part of the facilities used by J.A. Jones Construction Services Co and not the current 668 building. Neal Shipp of JA. Jones was contacted about the possible situation. Neal checked their records and talked to his employees and he could not find any record of bldg 667 or what might have become of it.



**Item 32. Reuse of pesticide containers: (In Compliance)**

- a. The type of pesticide and containers being used by plant personnel do not lend themselves to reuse. The off-site contractor is responsible for disposal of his containers.

**Item 33. Disposal of pesticide related waste: (In Compliance)**

- a. FIFRA defers disposal requirements to RCRA. If a pesticide is listed as a hazardous material under RCRA and the container is rinsed at least three times, the container can be disposed of as solid waste. If the container is not rinsed out or is a container that does not lend itself to rinsing, it may be treated as hazardous waste and count toward the waste stream volume for that facility.
- b. Since RFP only uses pesticides that are not RCRA listed, of low to moderate toxicity, and in small amounts; disposal of spent containers can be in an approved sanitary landfill. This occurs on plantsite in the approved landfill.
- c. Since off-site contractors would be used for spraying herbicides the contractor is responsible for the disposal of the containers.

**Item 34. Pesticide waste in the industrial effluent stream: (In Compliance)**

- a. There is very little chance of the pesticides currently being used entering the industrial effluent stream. Other than the blowdown from the cooling towers, the industrial effluent is controlled in an enclosed system. The water and wastewater is treated and recycled within the system. The blowdown water from the cooling towers is cycled through the sewage treatment plant and discharged under the NPDES permit.

**Item 35. Storage of pesticide related waste: (In Compliance)**

- a. Under the current program there are no pesticide related wastes stored at RFP. Waste containers from the use of the wasp and mouse poison can legally, and is, disposed of in the on-site sanitary landfill as it is generated.

**Item 36. Restricted use pesticides: (In Compliance)**

- a. There are no restricted use pesticides used on RFP, nor are there any plans to use them.

**Item 37. Competency of applicators for restricted use pesticides: (In Compliance)**

- a. Not applicable to RFP, see Item 36.

**Item 38. Commercial applicators use for restricted use pesticides: (In Compliance)**

- a. Not applicable to RFP, see Item 36.

**Item 39. Pesticide handlers authorized for restricted use pesticides:(In Compliance)**

- a. Not applicable to RFP, see Item 36.

**Item 40. Are licenses/certificates current: (In Compliance)**

- a. Pesticides used by RFP personnel do not require a applicators license/certificate.
- b. The contracted off-site applicator for the insects and mice control did have a current license and the number is on file in Bldg 331. (Terminex, 4645 Joliet Street, Denver, Co., License No. 122)

**Item 41. Facility have application records: (In Compliance)**

- a. Although not required by FIFRA, the Colorado Pesticide Applicators Act requires that commercial applicators keep records of applications that include items specified in the Act.
- b. The contract applicator for insect and rodent control is required by the existing contract to provide a copy of the record for each treatment. Some application records were available, but these consisted only of a colored map showing application area, date, amount and type of pesticide.
- c. Historical records of pesticide application on site are very sketchy. Very little record exists for where, when, what, how much, and how often pesticides were used.
- d. When Dick Irwin was given the duties of coordinating pesticide usage, he was told to keep records, but received no guidance on what kind of records to keep or how to maintain them. He maintains a map on his office wall and colors in the plant areas as they are treated.

**Item 42. Facility have inventory records: (In Compliance)**

- a. Since RFP does not store large amounts of pesticides, inventory records are not required by FIFRA.
- b. The only inventory records available are those maintained by Purchasing when actual purchases were made.

**Item 43. Target pests indicated on records: (In Compliance)**

- a. In most cases the records available indicate which target pest the treatment is directed toward, especially dealing with the ants and mice control.
- b. In the few available records dealing with herbicide use the target species often involved several species with a blanket approach. Chances are that each site did not contain all of the listed target species.

**Item 44. Pesticide registered against target species: (In Compliance)**

- a. Based on the label copies provided in the surveillance it appears that the pesticide being used is registered for use against the particular target species.
- b. In the case of past herbicide species, the pesticide used(2,4-D) is effective against most broad-leaf species, therefore, there may be species affected beyond the target species.

**Item 45. Pesticide applicator training records: (In Compliance)**

- a. This does not apply to personnel on site since no one is certified to be an applicator.
- b. In the case of the contract applicator we do not have access to those types of records. We can only assume that if they are licensed, they are fully trained.

**Item 46. Pattern of application recorded: (In Compliance)**

- a. This is not applicable in the case of treating for ants and mice around or within buildings, although application locations are.
- b. In the case of herbicide applications, past records do not include this type of information.

**Item 47. Weather measurement recorded: (In Compliance)**

- a. This is not applicable for treating buildings for mice or insects.
- b. Past herbicide application records do not contain this type of information.

**Item 48. Economically and feasible alternatives: (In Compliance)**

- a. There are no records of alternatives being considered for control of insects and rodents within and around the buildings.
- b. Although not very comprehensive, there are partial records indicating that alternatives to herbicides have been considered in isolated cases. These included the use of mowing and fire. There has also been an introduction of weevils for thistle control in 1977. The

files contained no information on the effectiveness of the weevil introduction.

- c. Through conversations with Ken Shirk with Utilities, it was learned that normal household bleach is often used, in place of NALCO 2810, to control the algae in the swamp coolers and cooling towers. Ken stated that the bleach works as well as the biocide but must be applied more often.

**Item 49. Compliance with NEPA: (Non-Compliance)**

- a. There is concern that pesticide uses are not currently in compliance with NEPA.
- b. The use of Biocides and Herbicides was addressed on page 2-187 of the 1980 Final Environmental Impact Statement.
- c. There was no discussion of the associated impacts, or of alternatives. It only gave a list of the actions for 1977 program.

**Item 50. Prior inspection:**

- a. No record exists of prior program review or inspection.

**Other Findings:**

**1. Responsible Organization:**

- a. There have been at least four organizations involved in the pesticide program. These include "Permitting and Compliance", "Plant Services", Utilities, and "Clean Water Act Environmental Restoration". In addition, others that have been involved to a lesser degree are: Contracting, Security, and the Remediation Programs Environmental Restoration.
- b. Of the individuals interviewed, no one was aware of any formal documentation that assigned overall program responsibility to one organizational unit.

**2. No central location for maintaining files and records**

- a. Files are currently located in at least three different offices. This includes Permitting and Compliance, Plant Services, and Remediation of Environmental Restoration.
- b. Current files are very fragmented with little historical information existing in any of them.
- c. There is no direction for what should be maintained in the files.

**3. Membership in Weed Control District**

- a. There is a record in the file indicating Rocky Flats was within the boundary of the Ralston Valley Pest Control District.

- b. This organization was adopted by the Jefferson County Commissioners on March 15, 1971. The termination date of the organization was January 1, 1981. The Jefferson County Extension Service confirmed that the District was dissolved on the termination date.
- c. The organization was formed to control pests such as noxious weeds, rodents, and insects within the boundary of the District.
- d. As part of this Weed Control District, RFP had certain responsibilities to control undesirable weed species. These responsibilities served as partial justification for the use of herbicides on RFP.

#### 4. Management of Undesirable Plants

- a. Although FIFRA does not require undesirable plants to be managed, if pesticides are used the action must comply with FIFRA.
- b. Pursuant to P.L. 93-629, Section 15(Federal Noxious Weed Act), each Federal Agency shall establish and fund an undesirable plants management program. In addition they shall implement cooperative agreements with state agencies for management of undesirable plant species on Federal lands. This shall involve establishing an integrated management system to control those plant species.
- c. The State of Colorado passed and signed into law on May 7, 1990 Article 5.5 of the Colorado Statutes, called the "Colorado Weed Management Act". This places increased emphasis on controlling undesirable plant species on lands in Colorado. As an indication of their concern and desire to include Federal lands, the law contains a provision for determining Federal cooperation and compliance, then a report provided to the General Assembly on or before January 15, 1994 concerning those findings.
- d. As noted earlier, EG&G has terminated all uses of herbicides on plant site for 1990 and 1991. If no controls are utilized, and the undesirable plants allowed to spread, the lack of action would not be in the spirit of the Federal or State laws.
- e. The Federal law emphasizes the use of an integrated management system. This would include the use of preventive measures, physical or mechanical methods, biological agents, herbicide methods, cultural methods, and land management practices.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

Overall, RFO is in compliance with FIFRA, however, there are several weaknesses and discrepancies in the way the program is functioning. There are operational, as well as, organizational problems which need to be fixed.

##### A. Off-site Contractors:

The past decision to utilize off-site contractors for most pesticide applications was a very fortuitous act for eliminating a host of potential FIFRA compliance problems. This means that many of the storage facility guidelines do not apply, that applicators do not have to obtain certification, many of the potential spill situations do not occur, personnel exposure to pesticides are greatly reduced, and handling of waste pesticides and their containers is eliminated. It is highly recommended that this practice of contracting with off-site contractors for application of most pesticides continue.

##### B. Responsible Organizational Unit:

The lack of any organizational focus for this program is a concern. With several organizational entities involved it is easy to overlook a critical aspect of the program or fail to provide the proper notification to ensure that a proposed application will not adversely affect another operation. Management responsibility for the total program is lacking. Formal designation of the responsible organizational unit must be made and communicated to the remaining organizations. Specific duties within the program may be delegated to other organization units, however there must be one responsible manager.

##### C. Central Filing or Record System:

There needs to be a central filing or record keeping system for the entire program. There now exists partial records, in several different locations and kept by different organization units. There is no clear direction as to the type of record or how to maintain the records. The existing files contain very sketchy information on the historical aspects of the program. The past treatments and treatment practices could be very valuable for determining the future direction of the program and provide evidence of what practices worked. When the responsible organization is defined as recommended in B above, the manager needs to provide guidance on who should keep the records, where they should be maintained, and what information needs to be in them.

Commercial applicators are required by Colorado Statute to keep records of pesticide applications. These records are to include the following information: a) name and address for whom application was made, b) location where application was made, c) target pest, d) site, crop, commodity or structure treated, e) specific pesticide applied, f) dilution rate, g) application rate, h) carrier if other than water, and i) date and time of application. Since they already are required to maintain these records, a copy of this record should be provided to RFP for inclusion in the on-site files. Currently RFP is receiving from the contractor for ant and rodent control a colored map showing treatment locations with a scribbled note on the page listing pesticide used, amount applied, and the date.

Records of application are very important and need to include items such as application patterns, what the target pests are, type of equipment used, and what the weather conditions are. These records are very valuable for application of herbicides, but probably not necessary for the application of pesticides around the buildings. For example, studies in Canada on the aerial application of 2,4-D has shown drift downwind for several miles. If claims are made by off-site adjacent parties for damages to untargeted vegetation, records showing the wind speed, humidity, etc. are invaluable. When guidance on the proper record keeping system is developed, these kinds of considerations should be included.

#### D. NEPA documentation:

The NEPA documentation for authorizing use of pesticides is very inadequate. The 1980 Final Environmental Impact Statement included a very brief section about what pesticides are being used based on the 1977 application plan. However, there is no analysis of alternatives, or what the impacts of application may be. Since work is beginning on writing of a new site-wide EIS it is appropriate to include pesticide use as a topic for analysis. In addition, if there is a need (prior to completion of the EIS), to utilize pesticides such as herbicides in the buffer zone, an Environmental Assessment should be prepared prior to use for determining applicability of proposal and to highlight any potential impacts. A decision for use can then be made based on this analysis.

#### E. Current Storage Location:

Because of the limited amount of pesticide maintained on site, storage is not a major concern. However, in the situation existing with storage, in Building 331, of the spray cans of Bowman brand wasp spray there

exists the potential for accidental misuse. Since they are stored in the same cabinet, and immediately adjacent to cans of lubricants, etc, that have a very similar label, they could be inadvertently picked up by someone in a hurry. In order to prevent this, a physical divider of some sort needs to be installed in the cabinet. This could be a sheet of metal, or a screen partition, which would require a little more effort to enter and would force someone to think about what they are picking up. In addition, the outside of the cabinet should be labeled with a word such as "danger", "pesticide", or "poison" in addition to the "flammable" label already there.

F. Missing Building 667:

There seems to be a great amount of confusion as to what happened to Building 667. Since the files show that pesticides were stored there at least up through 1978, there is a potential that pesticides could have been spilled during loading or mixing operations. If that building was similar to building 668 in construction there is a good chance that the floor was only dirt, which increases the chance for residual amounts to be present. A more determined effort needs to be done in order to locate Bldg 667 or the previous location of the building, and if necessary, sample the soil to determine if there are pesticides residues present.

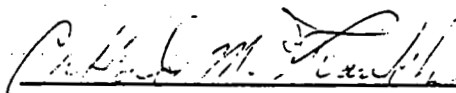
G. Integrated Pest Management:

As stated earlier, this is not a requirement of FIFRA, however, if an integrated pest management system includes the use of pesticides, compliance with FIFRA is required. In order to be in compliance with the Federal law as well as the State of Colorado law, RFP needs to consider the management of undesirable plant species. In addition, if RFP is to prepare a plan to manage the undesirable plant species it would make sense to broaden the scope of the plan to include the total pest management situation on site. An integrated pest management plan on a site wide basis should address the control of insects, rodents, as well as the management of vegetation. It would necessarily include use of education, preventive measures, physical or mechanical methods, biological agents, insecticide methods, rodenticide methods, herbicide methods, cultural methods, and land management practices such as grazing.



#### H. Feasible Alternatives:

As discussed earlier, the use of household bleach in place of the NALCO 2810 algicide is already occurring. Ken Shirk stated that what little amount of NALCO 2810 there is left will be used by the end of this summer season. He also stated that they will not purchase any additional, but will convert totally to using bleach as the treatment for the swamp coolers and cooling towers. This change is highly recommended. Not only will the cost be less, but there will not have to be special storage facility, nor special care in disposing of any waste or waste containers.



Date: 3-28-91

Clifford M. Franklin

Program Manager for Environmental  
Reporting and Planning

## DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) Dick Irwin BLDG/AREA/UNIT(S) Rocky Flats Plant DATE 11-8-90  
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SURVEILLANCE QUESTIONS	CIRCLE RESPONSE	REFERENCE	COMMENTS
1. DOES the facility use or store pesticides? - If YES, proceed with checklist.  - If NO, checklist is complete.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> NA		Biocide - NALCO - 2810, Herbicide, Oust, Karmex, Velpar, Surflan, Rodenticide/Insecticide, D-Con, Maki-Meal-Rice, Knox Out, Drione, Inside Residual Dust, Ficam+, Bowman
2. Are the pesticides used:			
a. Classified as highly or moderately toxic?	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> NA		
b. Stored in containers marked with the words "DANGER", "POISON", or "WARNING"?	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> NA		
c. Stored in containers marked with the "Skull and Crossbones" symbol?	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> NA		

## DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_ BLDG/APEN/UNIT(S) \_\_\_\_\_  
\_\_\_\_\_

DATE \_\_\_\_\_

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SURVEILLANCE QUESTIONS	CIRCLE RESPONSE	REFERENCE	COMMENTS
d. Circle general types used:  <u>Algicides</u> <u>Insecticides</u> <u>Fungicides</u> <u>Herbicides</u> <u>Rodenticides</u> Other: specify _____			
3. Are there excess pesticides to be disposed of?  - If YES, proceed with checklist  - If NO, proceed to Question 4.	Y <u>(N)</u> NA		
a. Can these pesticides be used within their shelf life?	<u>(Y)</u> N NA		
b. Have attempts been made to return the excess pesticides to the seller?	Y N <u>(NA)</u>		

# DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_

BLDG/AREA/UNIT(S) \_\_\_\_\_

DATE \_\_\_\_\_

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## SURVEILLANCE QUESTIONS

CIRCLE  
RESPONSE

REFERENCE

COMMENTS

4. Have procedures at this facility been developed to provide documentation for all accidents and incidents (e.g., releases) regarding pesticides, containers, or waste to the appropriate EPA Regional Administrator?

Y ☒ N ☐ NA ☐

5. Does the facility have any pesticides that have been canceled or suspended (either in-house or contractor supplies)?

Y ☐ N ☒ NA ☐

6. Are there surveillance and/or status data and records pertaining to the amount, location, physical form, type, and condition of the containers, along with dates of manufacture or purchase for all pesticides on hand?

Y ☒ N ☐ NA ☐

7. Has all on-site storage and disposal been done in accordance with the labeling?

Y ☒ N ☐ NA ☐

8. Has the on-site storage and disposal been done in a manner that does not allow open dumping?

Y ☒ N ☐ NA ☐

9. Has all storage and disposal been done in a manner consistent with all Federal or State pollution control standards?

Y ☒ N ☐ NA ☐

Used in all buildings for rodent and insect control on demand.

## DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_

BLDG/AREA/UNIT(S) \_\_\_\_\_

DATE \_\_\_\_\_

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## SURVEILLANCE QUESTIONS

CIRCLE  
RESPONSE

REFERENCE

COMMENTS

10. Are there pesticide storage sites at the facility?

☒ Y ☐ N ☐ NA

Building 331

- If YES, proceed with checklist

- If NO, proceed to Question 11

a. Are sites located where flooding is unlikely?

☒ Y ☐ N ☐ NA

b. Are sites located where soil texture, structure, and geologic/hydrologic conditions will prevent contamination of any water system by runoff or percolation?

☒ Y ☐ N ☐ NA

c. Is drainage from the site contained?

☒ Y ☐ N ☐ NA

d. Is drainage from the site monitored?

☒ Y ☐ N ☐ NA

e. If drainage is contaminated, is it disposed of as an excess pesticide?

Y ☐ N ☒ NA

f. Is consideration also given to containing wind-blown, pesticide-laden dusts?

Y ☒ N ☐ NA

# DOE - HOCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_

BLDG/AREA/UNIT(S) \_\_\_\_\_

DATE \_\_\_\_\_

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## SURVEILLANCE QUESTIONS

11. Are there pesticide storage facilities?

Note: "Facility" is defined as a structure where ventilation, fire protection, etc. can be assessed (40 CFR 163.10(c)).

a. Are pesticides stored in a dry, well ventilated, separate room, building, or covered area?

b. Is fire protection provided?

c. Is entire storage facility secured by a climb-proof fence?

d. Are doors and gates kept locked?

e. Are identification and warning signs placed in rooms, fences, and buildings?

CIRCLE RESPONSE

☒ Y ☐ N ☐ NA

☒ Y ☐ N ☐ NA

☒ Y ☐ N ☐ NA

☒ Y ☐ N ☐ NA

☒ Y ☐ N ☐ NA

☒ Y ☐ N ☐ NA

REFERENCE

COMMENTS

Storage cabinet in Building 331  
Inside main security area, within a locked cabinet

# DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_ BLDG/AREA/UNIT(S) \_\_\_\_\_

DATE \_\_\_\_\_

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## SURVEILLANCE QUESTIONS

CIRCLE  
RESPONSE

REFERENCE

COMMENTS

f. Have provisions been made for decontamination of personnel and equipment such as wash basins and showers?

Y N NA

g. Has decontamination area been lined with impervious material and guttered?

Y N NA

12. Are pesticide containers stored with label plainly visible?

Y N NA

13. If containers are damaged, are the pesticides transferred to good containers and properly labeled?

Y N NA

14. Are lids and bungs tight?

Y N NA

15. Are pesticides segregated by formulation and identified with a sign of that formulation?

Y N NA

16. Are rigid containers stored in an upright position?

Y N NA

17. Are all containers stored off the ground?

Y N NA

Disposed of accordingly

No incompatible types of pesticides stored

# DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

DATE \_\_\_\_\_

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BLDG/AREA/UNIT(S) \_\_\_\_\_

NAME(S) \_\_\_\_\_

COMMENTS

SURVEILLANCE QUESTIONS

REFERENCE

CIRCLE RESPONSE

10. Are all containers stored in an orderly way to permit ready access and inspection? ☒ Y ☐ N ☐ NA
19. Is there a complete and current surveillance indicating the number and identity of containers in each storage unit? ☐ Y ☒ N ☐ NA
20. If there are excess pesticides and containers, are they segregated by methods of disposal? ☐ Y ☐ N ☒ NA
21. Are containers checked regularly for corrosion and leaks? ☒ Y ☐ N ☐ NA
22. Are absorptive materials kept on hand for emergencies? ☒ Y ☐ N ☐ NA
23. Are all containers inspected for leaks before handling? ☒ Y ☐ N ☐ NA
24. Are unauthorized persons kept from storage area? ☒ Y ☐ N ☐ NA
25. Are pesticides kept away from food, feed, and other articles for consumption by humans or animals? ☒ Y ☐ N ☐ NA

Accurate purchasing records maintained

Aerosol cans checked prior to usage

Spill cabinet located in Building 331



## DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_

BLDG/AREA/UNIT(S) \_\_\_\_\_

DATE \_\_\_\_\_

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SURVEILLANCE QUESTIONS	CIRCLE RESPONSE	REFERENCE	COMMENTS
26. Are food, beverages, tobacco, eating utensils, and smoking equipment kept away from storage or loading areas?	(Y) N NA		
27. Are rubber gloves available for handling containers of pesticides?	(Y) N NA		
28. Are there facilities for hand washing?	(Y) N NA		
29. Is protective clothing provided?	(Y) N NA		
30. Are respirators or gas masks provided?	(Y) N NA		
31. Is the site Fire Department aware of the amount and location of pesticides and their potential hazards in case of a fire?	(Y) N NA		Fire Department knows location of cabinet
32. Are there procedures established that ensure that pesticide containers are not reused?	Y N (NA)		Nonreusable containers
33. Is all pesticide related waste disposed of according to type?	(Y) N NA		

## DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_ BLDG/AREA/UNIT(S) \_\_\_\_\_ DATE \_\_\_\_\_  
PAGE 9 OF 11

SURVEILLANCE QUESTIONS	CIRCLE RESPONSE	REFERENCE	COMMENTS
34. If pesticide-related waste becomes part of an industrial effluent stream, do they comply with the Federal Water Pollution Control Act as amended?	<input checked="" type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> NA		Pesticide related waste is not allowed in the industrial effluent stream. If it inadvertently enters any effluent stream, all applicable Federal, State, and DOE rules and regulations will be complied with.
35. If pesticide-related wastes are stored, are they managed in accordance with stored pesticide provisions?	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> NA		No pesticide wastes are stored.
36. Are there restricted-use pesticides used at the facility?	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> NA		
37. Has the competency in use and handling of pesticides of applicators for restricted use pesticides been by written examinations.	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> NA		
38. Are certified commercial applicators employed by the facility for restricted pesticide use application and supervision?	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> NA		
Circle type of certification:			
EPA <input checked="" type="radio"/> State <input type="radio"/> DOD			
Other _____			

# DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_ BLDG/AREA/UNIT(S) \_\_\_\_\_ DATE \_\_\_\_\_  
 \_\_\_\_\_ PAGE 10 OF 11

## SURVEILLANCE QUESTIONS

### CIRCLE RESPONSE

### REFERENCE

### COMMENTS

39. Are pesticide handlers authorized for restricted use pesticides?

☒ Y ☐ N ☐ NA

40. Are licenses/certificates current (not expired)?

☒ Y ☐ N ☐ NA

41. Does this facility have application records?

☒ Y ☐ N ☐ NA

42. Does this facility have inventory records?

☒ Y ☐ N ☐ NA

43. Are target pests indicated on application records?

☒ Y ☐ N ☐ NA

44. Are the pesticides used registered for use against the target pest?

☒ Y ☐ N ☐ NA

45. Are pesticide applicators training records current and available for inspection?

☐ Y ☐ N ☒ NA

46. Is the pattern of pesticide application recorded?

☐ Y ☐ N ☒ NA

47. Are weather measurements taken and recorded during application?

☐ Y ☒ N ☐ NA

Purchasing documents

Aerosol can spray

Weather is visually checked prior to application

# DOE - ROCKY FLATS PESTICIDE SURVEILLANCE

NAME(S) \_\_\_\_\_ BLDG/AREA/UNIT(S) \_\_\_\_\_ DATE \_\_\_\_\_  
 \_\_\_\_\_ PAGE 11 OF 11

SURVEILLANCE QUESTIONS	CIRCLE RESPONSE	REFERENCE	COMMENTS
48. Are there economically or environmentally feasible alternative practices which provide adequate control?  EXPLAIN:	<input checked="" type="radio"/> N <input type="radio"/> NA		
49. Are all pesticide uses in full compliance with NEPA documentation on this facility?	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> NA		DOE reserves the authority to make all NEPA determinations.
50. Has this facility's pesticide program been inspected before?  Circle by whom: EPA <input checked="" type="radio"/> State <input type="radio"/> DOE Other: specify _____	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> NA		Run-off water monitored by CDH.
GENERAL RESULTS:			

# SURVEILLANCE GUIDESHEET

SURVEILLANCE REPORT NO. 001

PAGE 1 OF 3

PROGRAM ACTIVITY FOR SURVEILLANCE FIFRA COMPLIANCE

EVALUATOR CLIFF FRANKLIN DATE 01/28/91

LOCATION T130A

**INDIVIDUALS INTERVIEWED**

NAME DAN KUNZ ORGANIZATION EG&G PERMITTING & COMPLIANCE

NAME \_\_\_\_\_ ORGANIZATION \_\_\_\_\_

NAME \_\_\_\_\_ ORGANIZATION \_\_\_\_\_

ACTION	COMMENTS	FOLLOWUP
1. LABELS	WHEN QUESTIONNAIRE WAS RETURNED, SOME PRODUCT LABELS WERE NOT INCLUDED.	DAN KUNZ WILL MAKE COPIES OF ADDITIONAL LABELS AND DELIVER THEM TO ME
2. ALGACIDES	INFORMATION WAS NOT INCLUDED WITH QUESTIONNAIRE	INFORMATION IS NOW AVAILABLE FROM DAN KUNZ. COPIES WILL BE PROVIDED
4. PROCEDURES	PROCEDURES EXIST ON PLANT FOR REPORTING SPILLS, ETC. FOR ALL OPERATIONS. THEY ARE NOT SPECIFIC FOR PESTICIDES BUT MAY BE SUFFICIENT	NEED TO REVIEW REPORTING REQUIREMENTS TO ENSURE THAT THE PROCEDURES IN PLACE ALSO COVER THE PESTICIDES SITUATION
6. RECORDS	THE RECORDS ARE KEPT IN BLDG. 331 SO THEY WERE NOT REVIEWED ON THIS DATE	RECORDS WILL BE REVIEWED DURING THE NEXT INTERVIEW IN BLDG. 331
7. DISPOSAL	DAN AGREED THAT ALL DISPOSAL IS BEING DONE IN ACCORDANCE WITH LABEL INSTRUCTIONS	NONE
11. STORAGE	PESTICIDES LOCATED IN LOCKED CABINET LOCATED IN BLDG. 331	STORAGE FACILITIES WILL BE VISUALLY CHECKED DURING INSPECTION OF BLDG. 331

# SURVEILLANCE GUIDESHEET CONT.

**FIFRA COMPLIANCE**
**JAN. 28, 1991**

 PAGE 2 OF 3

ACTION	COMMENTS	FOLLOWUP
11f. SHOWERS	THERE ARE SHOWERS, WASH BASINS LOCATED IN BLDG 331 -- FACILITIES OR PROCEDURES FOR CONTRACTOR APPLICATORS IN PSZ OR BUFFER ZONE NOT KNOWN BY DAN	NEED TO VISUALLY CHECK LOCATION, ETC. OF SHOWER. IN FOLLOWUP INTERVIEW DETERMINE PROCEDURES FOR CONTRACTORS IF THEY EXIST.
19. RECORD OF CONTAINERS	QUESTIONNAIRE INDICATED "N" FOR THIS SUBJECT WITH COMMENT REFERRING TO PURCHASING RECORDS. DAN DIDN'T KNOW IF THERE ARE OTHER RECORDS AND DEFERRED THE ANSWER UNTIL OUR LATER MEETING IN BLDG. 331	NEED TO FOLLOWUP WITH DICK IN BLDG. 331
22. ABSORPTIVE MATERIALS	ABSORPTIVE MATERIALS ARE AVAILABLE FOR NORMAL OPERATIONS IN BLDG 331 AND IT IS ASSUMED THAT THEY WOULD BE AVAILABLE FOR ANY SPILLS FROM PESTICIDES	NEED TO CHECK ON AVAILABILITY AND PROXIMITY OF MATERIALS
24. AUTHORIZED ACCESS	CABINET IS KEPT LOCKED, HOWEVER DAN WAS NOT AWARE OF WHO CONTROLS KEY.	NEED TO DETERMINE WHO HAS KEY AND ACCESS TO KEY
25. PROXIMITY TO FOOD OR LUNCH AREAS	DAN WASN'T SURE ABOUT THE PROXIMITY	NEED TO VISUALLY CHECK LOCATION OF CABINET
36. RESTRICTED USE PESTICIDES	THE SURVEILLANCE QUESTIONNAIRE INDICATES NONE ARE USED, BUT DAN WASN'T SURE.	NEED TO CONFIRM ANSWER ON QUESTIONNAIRE
37. WRITTEN EXAM	QUESTIONNAIRE SHOWS "N/A" HOWEVER IF RESTRICTED USE PESTICIDES ARE USED THEN THIS WOULD APPLY	SAME AS # 36
41. APPLICATION RECORDS	THEY ARE KEPT IN BLDG 331 BY PLANT SERVICES AND WILL BE REVIEWED AT NEXT MEETING	CHECK RECORDS IN BLDG 331

# SURVEILLANCE GUIDESHEET CONT.

**FIFRA COMPLIANCE**

**JAN. 28, 1991**

PAGE 3 OF 3

ACTION	COMMENTS	FOLLOWUP
42. INVENTORY RECORDS	KEPT IN BLDG. 331	CHECK RECORDS IN BLDG. 331
43. TARGET PESTS	DAN DIDN'T KNOW IF IT IS IDENTIFIED ON FORM OR WHO MAKES DECISION ON WHAT PEST IS TARGETED OR HOW THAT IS TRANSLATED TO THE NEED TO TREAT	NEED TO CHECK RECORDS TO SEE IF TARGETED PEST IS IDENTIFIED.
46. APPLICATION PATTERN	QUESTIONNAIRE INDICATED "NA", HOWEVER IF HERBICIDES ARE APPLIED IN BUFFER ZONE PATTERN IS VERY IMPORTANT	RECORDS NEED TO BE CHECKED TO DETERMINE IF APPLICATION PATTERN IS IDENTIFIED
47. WEATHER MEASUREMENTS	QUESTIONNAIRE ANSWER IS DIRECTED TOWARD HOUSEHOLD TYPE PESTICIDES. BUFFER ZONE APPLICATIONS OF HERBICIDES SHOULD HAVE WEATHER RECORDED	NEED TO CHECK RECORDS TO SEE WHAT HAS BEEN RECORDED IN PAST APPLICATIONS
49. NEPA COMPLIANCE	THERE IS SOME QUESTIONS ABOUT PESTICIDES BEING COVERED UNDER EXISTING NEPA DOCUMENTATION	NEED TO CHECK WITH NEPA BRANCH TO DETERMINE ADEQUACY OF COVERAGE. THE UPCOMING SITE-WIDE EIS MUST ADDRESS PESTICIDE USE
50. PROGRAM INSPECTION	THE QUESTIONNAIRE INDICATES "Y", BUT THEN REFERS TO RUNOFF WATER MONITORED BY CDH. THERE MUST BE SOME CONFUSION ABOUT WHAT THE PROGRAM INSPECTION MEANS	CHECK RECORDS TO SEE IF ANY INSPECTION OF PROGRAM ACTUALLY OCCURED
OTHER	THERE DIDN'T APPEAR TO BE A CLEAR DEFINITION OF RESPONSIBILITY FOR THE FIFRA PROGRAM	NEED TO CLARIFY RESPONSIBILITY FOR THE PROGRAM WITHIN THE CONTRACTOR ORGANIZATION

# SURVEILLANCE GUIDESHEET

SURVEILLANCE REPORT NO. 2

PAGE 1 OF 2

PROGRAM ACTIVITY FOR SURVEILLANCE FIFRA

EVALUATOR CLIFF FRANKLIN DATE 02-19-91

LOCATION BLDG. 331

## INDIVIDUALS INTERVIEWED

NAME DICK IRWIN ORGANIZATION PLANT SERVICES

NAME DAN KUNZ ORGANIZATION PERMITTING & COMPLIANCE

NAME \_\_\_\_\_ ORGANIZATION \_\_\_\_\_

ACTION	COMMENTS	FOLLOWUP
Meet With Dick	Dick has been in Plant Services some time, however he only assumed the FIFRA responsibilities in August 1989. He deals with the contractor when application occurs on site.	I need to return and spend a little more time looking through his limited files including the existing contract.
6. Records	When Dick got the duties, his supervisor just told him to keep records with no instructions on how, or what information he should keep. He keeps a sheet with dates, etc. when the contractor does any work on site. He receives and keeps copies of application sheets that show what and where Terminex treats the bldgs for insects and rodents. He does not have any records of herbicide treatments that show amounts, or any of the other pertinent data that should be recorded during treatment. Dick does not have any historical files or information.	



# SURVEILLANCE GUIDESHEET CONT.

FIFRA mtg. with Dick Irwin

PAGE 2 OF 2

ACTION	COMMENTS	FOLLOWUP
11. Storage	<p>Dick keeps several cans of wasp spray and boxes of DeCon rodent poison in a locked metal cabinet. Also in the cabinet is an assortment of vehicle lubricants, etc. The cabinet is marked "Flammable" due to the cans of aerosol lubricants. The lubricants and wasp spray are made by the same manufacturer. The can labels are very similar except for the title of contents, etc. It would be very easy for someone to inadvertently pick up the wrong product.</p>	<p>The locked metal cabinet is suitable for storing the wasp spray and rodent poison, however, it should be labeled with "Danger! Insecticides and Rodenticides Contained Here"</p> <p>The cans of wasp spray need to be physically separated from the cans of lubricants to prevent picking up the wrong product.</p>
42. Inventory Records	<p>Dick does not have any inventory records in his files.</p>	
Other	<p>Dick did not know of any specific documentation assigning responsibility for the FIFRA program. He received it through default with no guidance or direction.</p>	<p>There is a real need to clarify who or what organization has responsibility.</p>

# SURVEILLANCE GUIDESHEET

SURVEILLANCE REPORT NO. 3

PAGE 1 OF 1

PROGRAM ACTIVITY FOR SURVEILLANCE FIFRA

EVALUATOR Cliff Franklin DATE 02/21/91

LOCATION T130B

## INDIVIDUALS INTERVIEWED

NAME Ralph Hawes ORGANIZATION CWAD

NAME \_\_\_\_\_ ORGANIZATION \_\_\_\_\_

NAME \_\_\_\_\_ ORGANIZATION \_\_\_\_\_

ACTION

COMMENTS

FOLLOWUP

## GENERAL COMMENT:

Ralph Hawes serves in an oversight capacity as the representative for the Clean Water Act Division. As such he reviews the proposals for use of pesticides and determines if they have the potential for impacting the water resource. He serves as a "Yes/No" decision point for the use of pesticide beyond normal building use. Due to detection of atrazine in the surface water a decision was made to terminate use of any herbicide during the 1990 year. He was currently preparing similar direction to prohibit applications during 1991.

They do not perform any other function within the pesticide program. Ralph has no records of past use, nor does he maintain records for current or proposed use, they do not monitor any contracts to ensure proper application methods, and do not become intricately involved in determining need for herbicide use. Ralph is not aware of any formal assignment of organizational responsibility for the FIFRA Program.

# SURVEILLANCE GUIDESHEET

SURVEILLANCE REPORT NO. 4

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PROGRAM ACTIVITY FOR SURVEILLANCE FIFRA

EVALUATOR Cliff Franklin

DATE 02-25-1991

LOCATION T130B

**INDIVIDUALS INTERVIEWED**

NAME Mike Guillaume

ORGANIZATION Remediation Programs

NAME \_\_\_\_\_

ORGANIZATION \_\_\_\_\_

NAME \_\_\_\_\_

ORGANIZATION \_\_\_\_\_

ACTION	COMMENTS	FOLLOWUP
Meeting with Mike	Mike has not been involved directly in the FIFRA program, he has only become involved through wanting to utilize herbicides on some remediation sites. Because of his interest he was given the files containing records of past applications, etc. Because of his desire to be able to use herbicides in the buffer zone, Mike will be involved in the future aspects of the program.	Mike has loaned me his files. I will review these to see what information is available.

~~10-21-78~~  
10-21-78

CHEMICALS - STORED IN BLDG. 667

<u>Description</u>	<u>Chemical Content</u>
Spectracide 600 (Ant Killer)	0,0-diethyl 0 (2-isopropyl 6-methyl-4-pyrimidinyl) Phosphorothioate..... 5% Inert ingredients..... 95%
Mouse Maize (Poisoned grain for mice and pigeons)	Anchymine alkaloid. .35% Inert ingredients...99.65%
Bee Bopper (Bee and wasp spray) EPA Reg. # 7754-15 15 oz. can)	Petroleum Distillate.... 13.50% Pyrethrins..... .15% Piperonyl Butoxide..... .30% N-octyl Bicycloheptene, Dicarbuximibe..... .50% Chlordane..... 2.00% Inert ingredients..... 84.00%
Malkill (insecticide) EPA-960-123-33537	→ Malathion..... 55.21% Petroleum Denivative.... 39.79% Inert ingredients..... 5.00%
TMTD - Rhoplex (rabbit and deer repellent)	Thiram (Tetramethylthioram disulfide)..... 20.00% Inert ingredients..... 80.00%
Decon rodent poison grain ← Not in use	
Ortho liquid iron (grass fertilizer)	Sulfer..... 3.10% Zinc..... .07% Copper..... 1.30% Iron..... 5.30% Gulconic acid..... 5.00% Inert ingredients..... 91.40%
Excel (lawn fertilizer)	Nitrogen..... 18.00% Potash..... 8.00% Nitrogen..... 5.00% Plus Acid..... 4.00%
→ DMA 4 (Herbicide weed control) E.P.A. # 464-196-AB	Dimethylamine salt 2,4- Dichlorophenoxyacetic acid equiv..... 49.3% Inert ingredients..... 50.7%
Hyvar X-L (Bromacil weed killer) EPA # 352-346-2A	Lithium salt of bromacil 21.9% Inert ingredients..... 78.1%
→ Esteron 76DE (Herbicide weed control) E.P.A. # 464-279	Dichlorophenoxyacetic Acid, Butyl Esters.. 79.2% Inert ingredients..... 20.8%

Description

Chemical Content

Tordon 22K (Herbicide weed control)

EPA # 464-323 AA

Picloram..... 24.9%  
(4-Amino-3,5,6-trichloropicolinic acid)  
Inert ingredients..... 75.1%

Ureabor (U.S. Borax granual weed and grass control)

E.P.A. # 10659-51

Sodium Metaborate Tetraphydrate..... 66.5%  
Boron Trioxide..... 22.6%  
Sodium Chlorate..... 30.0%  
Bromacil..... 1.5%  
Inert ingredients.... 2.0%

Banvel EPA # 876-25-AA

Diagon

Gison Grain (birds)

Malathion (Ten Men)

Diagonox (BW dicide) → EPA # 100-AL-1

Any other Pesticides to be used by Pest-Contractor.